

AGENDA

COMMITTEE ON PUBLIC SAFETY AND TRAFFIC

June 20, 2006

**Aldermen Osborne,
O'Neil, Shea, Roy, Long**

6:00 PM

**Aldermanic Chambers
City Hall (3rd Floor)**

1. Chairman Osborne calls the meeting to order.
2. The Clerk calls the roll.
3. Draft of a Wayfinding Signage Package for the City of Manchester submitted by the Director of Planning and Community Development.
Gentlemen, what is your pleasure?
4. Traffic Signal Agreement between the City of Manchester and Town of Bedford regarding improvement, timing and maintenance of South River Road traffic signals at Second Street and South Main Street in Manchester and at Colby Court and Bedford Square in Bedford.
Gentlemen, what is your pleasure?
5. Bridge Street Signal Warrant Analyses-Findings submitted by Southern NH Planning Commission.
Gentlemen, what is your pleasure?
6. Middle Street and Market Street Parking Plan submitted by the Department of Highways.
Gentlemen, what is your pleasure?
7. Ordinance amendment submitted by Alderman Thibault.
 "Amending Section 70.55 Residential Permit Parking, of the Code of Ordinances of the City of Manchester by adding a Residential Parking Permit Zone #7."
Gentlemen, what is your pleasure?

8. Communication from James Osborne expressing his concerns regarding the safety at the intersection of Belmont and Spruce Streets.

Gentlemen, what is your pleasure?

9. Communication submitted by residents of Karatzas Avenue relative to the removal of "No Parking" signs in the area.

Gentlemen, what is your pleasure?

10. Discussion relative to Saturday parking fees.

11. Discussion relative to parking meter bag listing as of 12:30 PM on Monday, June 12, 2006 (subject to change daily):

1998	<u>Verizon</u> (originally Bell Atlantic) – 3 meter bags #11,13 & 14
02/08/2006	<u>North End Properties</u> – Bernard Gasser – 1 meter bag #2005 Customer was billed in the amount of \$1,020 and has paid \$1,020. Denise spoke with Mr. Gasser and his intention is to use the bag for a short time longer – claims he is doing rehab work in the JW Hills building and does not want the bag any longer that he has to.
03/02/2006	<u>RHouse</u> – Nick Michaud – 1 meter bag #CD
04/13/2006	<u>DemCon</u> – Jason Ferrell – 2 meter bags #77 & 9 – still in use
05/10/2006	<u>Calypso Communications</u> – Pat Hynes – 5 meter bags #F6, 10002, 15, 1234 & 2004 – still in use
05/24/2006	<u>TRB Development</u> – Jim Buchanan – 1 meter bag #10001 – still in use
06/12/2006	<u>DB Perry</u> – David Perry – 1 meter bag #C, still in use

12. Chairman Osborne advises that the Traffic Department has submitted an agenda, which needs to be addressed as follows:

STOP SIGNS:

On Proctor Road at Hanover Street, NEC
On Foch Street at Hanover Street, NWC
On Alladin Street at Congressional Lane, NWC
Alderman Pinard

On Jobin Drive at Miami Court, SWC/NEC (3-way stop) (Emergency Act)

On Miami Court at Jobin Drive, SWC (3-way stop) (Emergency Act)

Alderman DeVries

NO PARKING (9AM – 5PM/Monday-Friday):

On Ash Street, west side, from Orange Street to Prospect Street

Alderman Gatsas

NO PARKING ANYTIME:

On Ash Street, east side, from Myrtle Street to a point 100 feet north

On Oakhill Avenue, west side, from Reservoir Avenue to a point 500 feet north of
Tower Hill Road

On Oakhill Avenue, both sides, from Reservoir Avenue to Tower Hill Road

Alderman Gatsas

On Oakland Avenue, north side, from Woodbine Avenue to a point 50 feet east
(Emergency Act)

On Oakland Avenue, north side, from Woodbine Avenue to a point 45 feet west
(Emergency Act)

Alderman Osborne

On Pond Drive, west side, from a point 365 feet south of Goffs Falls Road to a
point 65 feet southerly (Emergency Act)

On Pond Drive, south side, from a point 225 feet west of Kennedy Avenue to a
point 85 feet west

Alderman DeVries

NO PARKING DURING SCHOOL HOURS:

On South Gray Court, east side, from Fernand Street to a point 84 feet south
(Emergency Act)

On South Gray Court, east side, from a point 196 feet south of Fernand Street to
the dead end southerly (Emergency Act)

Alderman DeVries

RESCIND 2-HOUR PARKING:

On Brook Street, north side, from Elm Street East Street to Chestnut Street
(ORD. 2714)

On Temple Court, east side, from Harrison Street to a point 100 feet south of
Brook Street (ORD. 8848)

Alderman Long

COMMERCIAL MOTOR VEHICLES PROHIBITED:

On Dearborn Street from a point 310 feet north of Grove Street to Summer Street
Alderman Osborne

**RESCIND COMMERCIAL MOTOR VEHICLE TRAFFIC PROHIBITED
(9:30 PM – 7AM):**

On Dearborn Street from a point 345 feet north of Grove Street to Summer Street
(ORD. 6659 – EMERGENCY ACT)
Alderman Osborne

RESCIND YIELD SIGN:

On Proctor Road at Hanover Street, NEC
Alderman Pinard

CROSSWALK:

Across South Main Street, south of Hale Street
Alderman Smith

Gentlemen, what is your pleasure?

TABLED ITEMS

A motion is in order to remove any of the following items from the table for discussion.

13. Discussion relating to police details as it relates to construction and/or nightclub details as requested by Alderman O'Neil.
(Tabled 03/21/2006 pending report from Police Department.)
14. Discussion relating to coordination of services and utilities during storm events such as what occurred on February 10, 2006 as requested by Alderman O'Neil.
(Tabled 03/21/2006 pending report from Fire and Police Departments.)
15. Parking Study Recommendations
(Tabled 04/18/2006 – previously forwarded under separate cover.)
16. **STOP SIGNS:**
On Lacourse Street at Rhode Island Avenue, NEC
On New York Street at Rhode Island Avenue, SWC
Alderman Duval
(Tabled 05/16/2006)
17. If there is no further business, a motion is in order to adjourn.

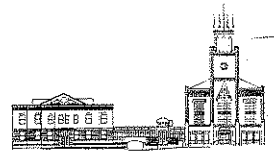


Robert S. MacKenzie, AICP
Director

CITY OF MANCHESTER

Planning and Community Development

Planning
Community Improvement Program
Growth Management



Staff to:
Planning Board
Heritage Commission
Millyard Design Review Committee

June 12, 2006

Committee on Public Safety and Traffic
City Hall
One City Hall Plaza
Manchester, NH 03101

re: *Wayfinding Sign Package*

Honorable Committee Members:

Enclosed please find a draft of a Wayfinding Signage Package for the City. We have worked with the Traffic Department, Public Works and the Chamber of Commerce to put this package together over the past couple of years. We have also begun review with the NH Department of Transportation.

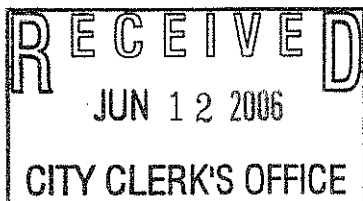
Comprehensive and consistent signage throughout the City will make it easier for visitor's and newcomers to find key points within the City, reduce the current clutter of signs and will provide a positive image of Manchester. Upon your approval, we would begin implementing the program within a pilot area which includes the central area of the City.

In conjunction with the wayfinding package, we will be implementing an Interpretive Signage package in the Millyard. This series of ten signs explains the historical significance of the Amoskeag Millyard. The research and design of the interpretive signs was made possible by the designation of the Millyard as a "Cultural and Scenic Byway".

I will be available to review this matter with you at your next meeting.

Sincerely,

Robert S. MacKenzie, AICP
Director of Planning and Community Development



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E-mail: planning@ManchesterNH.gov
www.ManchesterNH.gov

**CITY OF
MANCHESTER**

Wayfinding Signage Program

PROPOSED MAY 2006

Prepared by the
Planning and Community
Development Department

Wayfinding System

City of Manchester, New Hampshire

May, 2006

As Manchester grows towards becoming a world class small City with new businesses and institutions, there is a risk that a proliferation of signs will destroy part of that appeal, as well as creating a distraction for road users. Therefore, the purpose of the Manchester Citywide Wayfinding signage program is to help visitors from outside of the local area to find facilities easily and safely.

Guiding Principals

- The system is intended for visitors and new residents.
- The system is not meant for advertising.
- First impression and perception play an active role in determining the best route.
- The best route may not be the shortest or quickest.
- Terminology must be kept short and easily understood by a visitor
- Departure routes must be equally as important as arrival routes.

Goals

- Create a consistent wayfinding and identify system across a range of sign and publication mediums.
- Create a wayfinding program that focuses on directing visitors to major parking garages and destinations.
- Improve wayfinding and visitor information on events in the city.
- Establish wayfinding links to pedestrian paths in the city.
- Reduce the amount of visual clutter and proliferation of signs that can be distracting and make it difficult to find locations.
- Provide a positive image of the City.
- Establish ongoing administration and maintenance of the system.

Process

The wayfinding system will be administered by the Traffic Department with consultation of the Planning & Community Development Department and the Public Safety and Traffic Committee, as may be required. The Department shall be responsible for the location and maintenance of the sign systems and for the determination of what destinations will be identified in the wayfinding signage. Selection of destinations will be based upon the Criteria identified below. The Department shall annually review destinations to determine if certain locations will be deleted or added based upon the same Criteria.

The Department shall be responsible for determining the maximum number of destinations located on a particular sign or at a particular intersection. Excessive destinations can become confusing and counteract the goal of the system. The Department shall also be responsible for determining the

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most appropriate pathway or pathways for each destination. Directional signs not consistent with the Wayfinding System will be removed by the Department.

Sign Types

Citywide Destination Wayfinding Signage

- The focus of this system is encouraging visitors to park their cars – then find their destinations
- District gateway signs for entrance to the city and major business areas and cultural districts and neighborhoods.
- Direct directional signs that include information leading to parking garages and lots.
- Destination directional signs that direct visitors to cultural attractions, major government buildings, shopping districts and neighborhoods.
- Trailblazer directional signs.
- Arrival signs marking the entrance to parking facilities and major cultural institutions.
- Consistent, simple, city map for handout in parking facilities, kiosks and attractions.

Pedestrian Signage

- Pedestrian wayfinding map and signs.
- Pedestrian/bicycle trail signs.

Neighborhood Signage

- We must allow each neighborhood to show their own unique characteristics while creating a coherent streetscape for the whole city. Components include:
- Standards and initiative for unique neighborhood gateways. (future)
- Standards for neighborhood banners (future)
- Street sign program with neighborhood identity

Eligibility Criteria for Types of Destinations

The following criteria limit the number of destinations which can be in the Wayfinding System. The Traffic Department's annual review will follow these criteria. The System is not intended for commercial advertising or the location of businesses.

Allowable Destinations

- Airport: A commercial or public general aviation airport approved by the Federal Aviation Administration
- Arena: A stadium, sports complexes, auditorium or civic center. The hour requirements do not apply to this category.
- Courthouse and Municipal building: A building housing the primary offices or for the convening of official legal activities for the city, county, state or federal government.

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- College or university: An educational institutions that grants higher degrees and is fully accredited by the *New Hampshire Postsecondary Education Commission*
 - Commercial concentration: A commercial district or commercial corridor containing more than 20 individual stores.
 - Convention Center, Theaters, Arts Centers and Performing Arts centers: A facility for the performing arts, exhibits, conventions or concerts.
 - District: A relatively large urban area with defined boundaries that share a common physical, ethnic, cultural or political character.
 - Golf Course: A golf course open to the public that is at least 18 holes (non-par 3) and follows United States Golf Association regulations. The golf course must have an on-site Clubhouse.
 - Hospital: An institution providing primary health services and medical or surgical care to person suffering from illness, disease, injury, etc. Must be open for emergency care 24 hours a day.
 - Library: A building where books, manuscripts, historical documents, and other information are stored for public access.
 - Museum, gallery: A Facility in which works of artistic, historical, or scientific value are cared for and exhibited to the public.
 - Parking facilities: A structure or lot which provides a minimal of 50 spaces for parking.
 - Railroad/Bus Stations: A passenger terminal utilized for discharging and picking up passengers and ticketing.
 - Recreation Area, Forest or Wildlife Refuge: An area designated under federal, state or local jurisdiction made available to the public.
 - Snow Ski Area: A facility with those recreational amenities normally present at snow ski facility (mechanical lifts, down hill skiing, tubing, snowboarding, etc). This is considered a seasonal attraction. Months of operational do not apply to this category.
 - Visitor Information Center: A facility where the primary purpose of its operation is to provide information and tourist supportive services.

Signs will not normally be provided for the following:

1. Residential property
2. Individual commercial business
3. Social and sports clubs
4. Hotels/Bed and Breakfasts
5. Religious Institutions

3 Visitation Requirements

For an attraction to be eligible for inclusion in the signing system, it must have a minimum annual visitation of 1,500. Pedestrian signs may have a lower criteria threshold.

General Eligibility Requirements

The following general criteria must be met by all attractions in order to be eligible for inclusion in the Wayfinding Signing System.

General: The attraction shall be open to all persons regardless of race, color, religion, ancestry, national origin, sex, age or handicap: comply with all federal, State and local regulations and statutes for public accommodations concerning health, sanitation and safety.

Admission Charge: If a general admission is charged, it shall be collected upon the entry and other charges shall be clearly displayed, at the place of entry as to be readily visible.

Minimum Annual Attendance: The establishment must be used by and attract a particularly large number of visitors who are unfamiliar with the area. The annual attendance requirement is 1,500. More than 50% of the total annual attendance must be from actual tourist traffic.

Road System: The location of the attraction shall not require motorists to perform any illegal movements or U-turns and the roads shall be capable of handling the anticipated traffic column and types of traffic. Motorists shall be able to readily return to the street or highway and proceed in the original directional of travel after visiting the attraction. This may result in the attraction being required to install signing to guide the motorist to their original directional of travel.

Hours of Operation: Attractions other than arenas, schools, colleges/universities, performing arts centers shall maintain regular hours and schedules and be open to the public for a minimum of 104 days a year. Attractions shall maintain regular hours and schedules and be open to the public without any prior booking at least two days each week, six hours per day, and a minimum of eight months of the year.

Destination Publicity: The establishment must show evidence of promotion to the tourist market, e.g. a publicity leaflet or advertising.

Other Signs: The Attraction shall have no illegal advertising sign along any of the roadways. In addition, no other type of previously approved destination signing will remain, within the right-of-way including previously approved signs. Attractions with sign violations of City, State and or Federal laws or regulations will not be authorized to participate in the Signing System.

On-premise Sign: The attraction shall have an on-premise sign that is readily visible.

Seasonality: Signs for seasonal attractions such as farmers markets or summer concert series may be displayed when warranted. A minimum of 3 consecutive months with an attraction each week must exist. Such signing shall state the days of operation for the seasonal attractions and the signs will only be erected during the time period of the seasonal attraction.

Sign Design: Wayfinding signs will be fabricated by the Traffic Department. The designs of the signs will be at the discretion of the Traffic Department following the principles of the MUTCD and

the Standard Highway Signs book. Generic or international symbol for the category of the attraction may be considered for the incorporation on the signs. In certain instances, it may be appropriate to include a standard logo of a destination such as the Manchester Airport.

Sign Installation: Signs will be installed by the Traffic Department. The installation location of the signs will be at the discretion of the Traffic Department following the principles of the IMUTCD.

Sign Maintenance: Signs will be installed and maintained by the Traffic Department.

Sign Placement: Signs for eligible attractions may be authorized to provide direction for motorists from the nearest major state highway(s) to the attraction. Signs will be placed on the most direct route to the attraction to best serve the motoring public.

Signage Location

Selection of Destinations and Zones to be shown at each decision point or intersection shall be the decision of the Traffic Department. Generally speaking signs for vehicular traffic must be limited to five or at most six locations while pedestrian signs can have up twice that amount. Factors to be considered in selection include:

1. Density of destinations in a particular Zone.
2. Best pathway to a particular Zone or Destination.
3. Relative size of and distance to various destinations.

To demonstrate how these factors work, we can look at two different intersections. The off-ramp from I293 to Granite Street will be a major gateway into the City. This location has a very high density of destinations within close proximity. Since it is not possible to place all of the destinations at this sign location, the signage will focus on Zones and generic categories. The six items shown might therefore include: Westside, Downtown, Millyard, Colleges, Arena and Baseball Stadium. Of these, the first three are Zones, the fourth (Colleges) is a generic category and only two are specific destinations. These two make it to the list because they are very large attractions and they are very close to the gateway.

The intersection of Mammoth Road and Bridge Street is another major gateway into the City from I-93. By comparison, however, it has a lower density of destinations in the immediate zone. Therefore, more specific destinations (at a greater distance away) can be included. Therefore, the six at this location might be: Downtown, McIntyre Ski Area, Veterans Hospital, Derryfield Park, the Currier and the Elliot Hospital.

Attachments

- A. Graphic Design Standards for signage
- B. Preliminary Listing of Qualified Destinations

B. Preliminary Listing of Qualified Destinations

This listing is based upon a review of the Wayfinding pilot area. Additional destinations will be added as further areas beyond the pilot area are included in the system.

Zones

1. Downtown
2. Kelly Street Business
3. Main Street Area
4. Millyard
5. North End
6. Squog
7. Valley Street Business
8. Webster Street Business
9. Westside

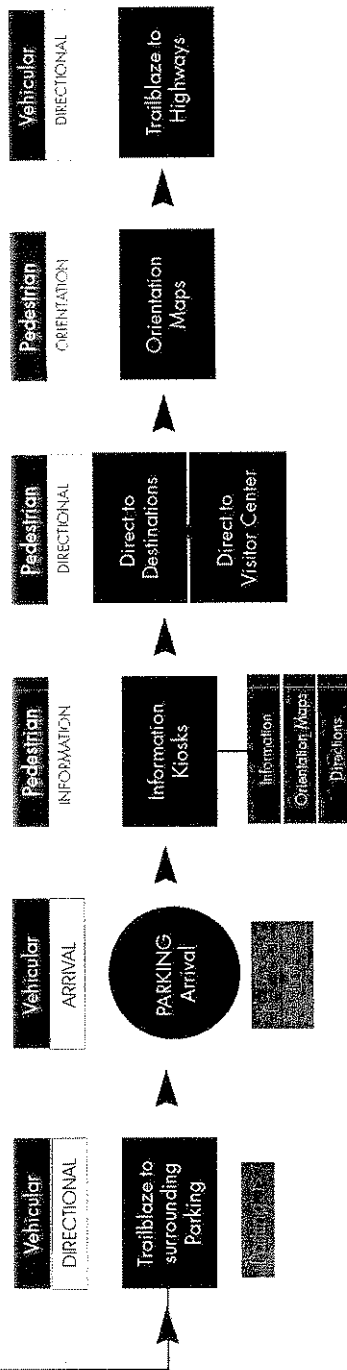
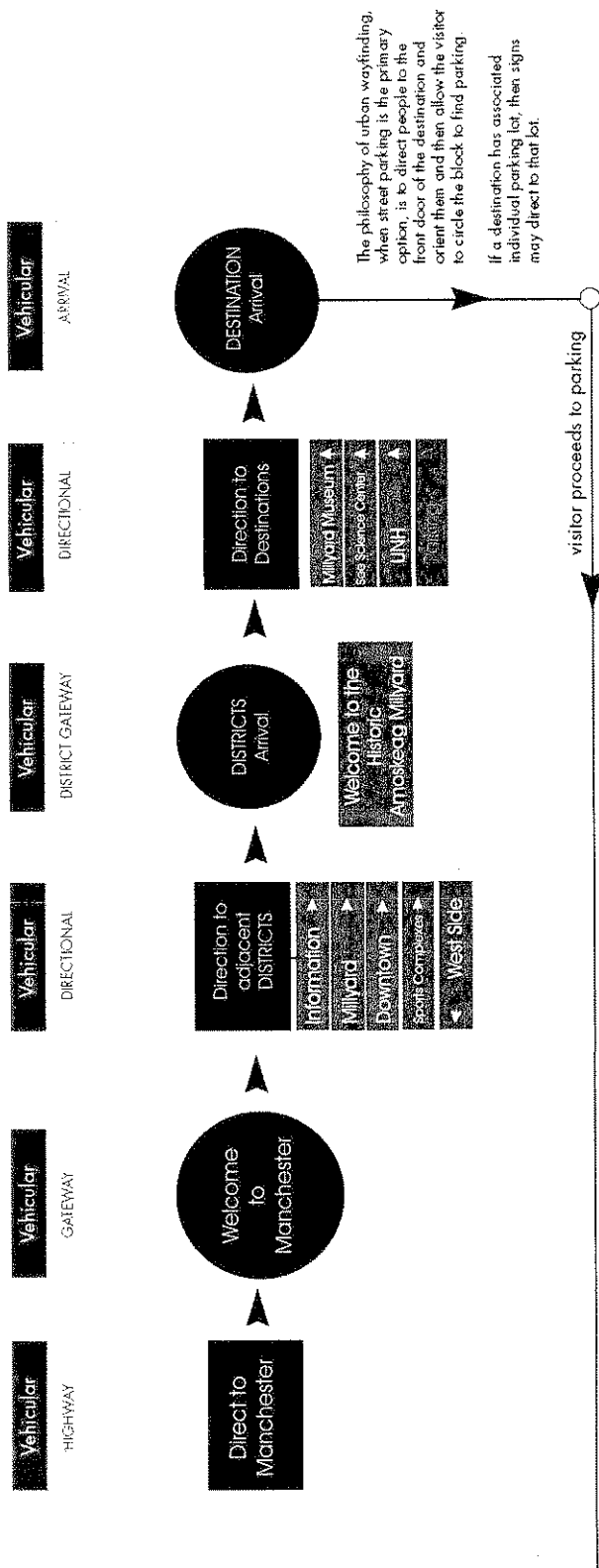
Destinations

1. Amoskeag Fishways
2. Animal Shelter
3. Arena
4. Baseball park
5. Carpenter Library
6. Cashin Senior Center
7. City Hall
8. Convention Center
9. Credit Union Museum
10. Currier Museum of Art
11. Derryfield Park
12. District Court
13. Farmers Market (Seasonal)
14. Federal Building
15. Franklin Pierce College
16. Gill Stadium
17. Heritage Trail
18. Hesser College
19. Hospital (CMC, Elliot and Veteran's)
20. Information
21. INS/DMV
22. JFK Arena
23. Manchester Historic Association
24. Massachusetts College of Pharmacy and Health Services
25. Millyard Museum
26. New Hampshire Community Technical College
27. New Hampshire Institute of Art
28. New Hampshire National Guard Armory
29. Palace Theater

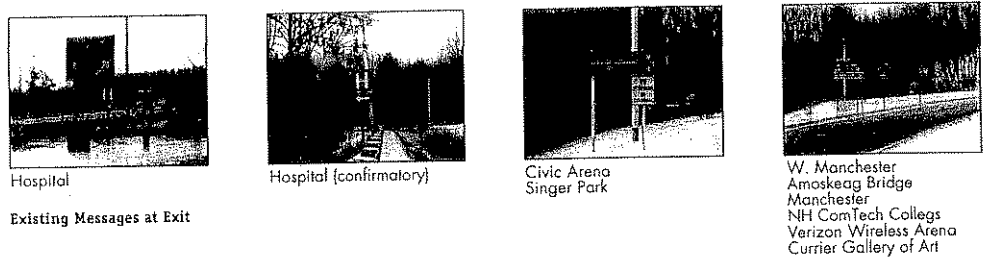
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30. Rines Center
 31. Riverwalk
 32. SEE Science Center
 33. Southern New Hampshire University
 34. Springfield College
 35. Superior Court
 36. Transportation Center
 37. University of New Hampshire
 38. Valley Cemetery
 39. Veterans Park
 40. Victory Park
 41. West Side Ice Arena
 42. West Side Library

Parking

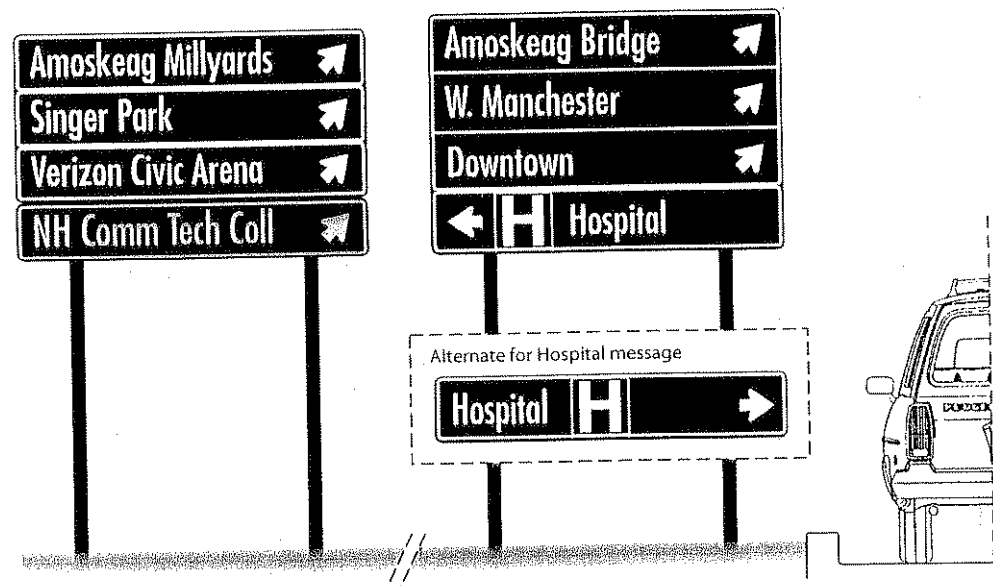
1. Arms Park Lot
2. Bank of America Garage
3. Bedford Lot
4. Center of NH
5. Franklin Street Lot
6. Hartnett Lot
7. Myrna Lot
8. Pearl Street Lot
9. Pine Street Lot
10. Victory Parking Garage



Route 293, Exit 6 Sign Concepts



Existing Messages at Exit



Standard Highway Signage

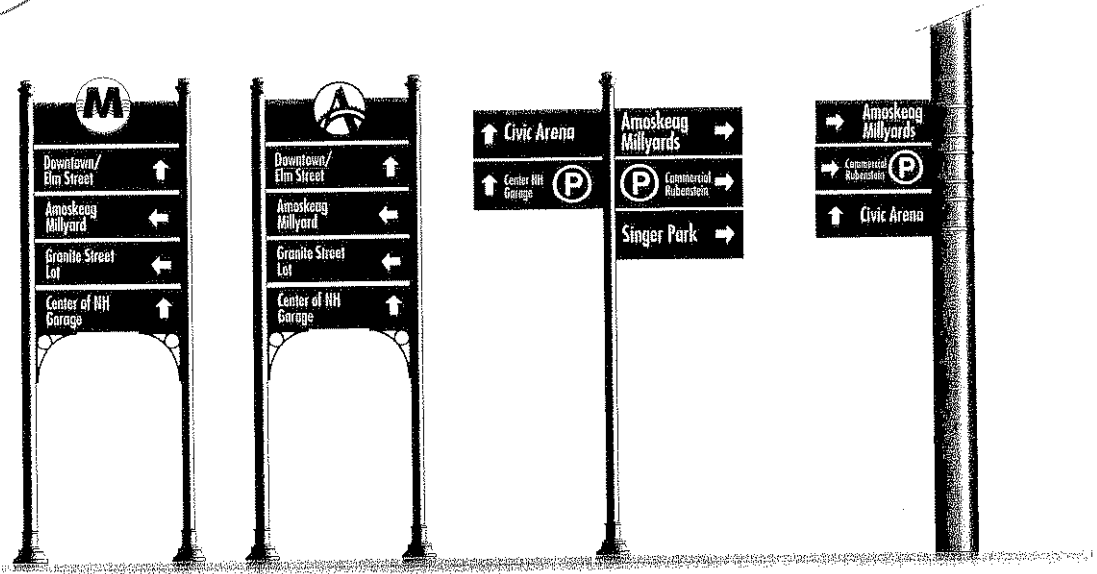


Modified Highway Signage with Logos/Pictograms
Note: Standard Highway Typeface to be Used

Interstate Wayfinding Options

Manchester Wayfinding Project w/ Amoskeag Byway Systems Integrated

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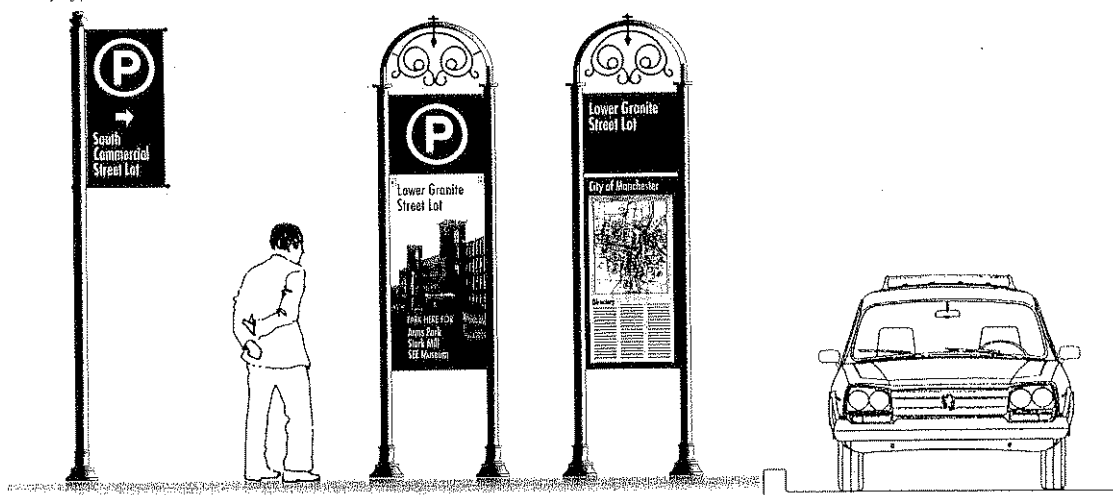


Elm Street District
Auto-Directional Sign*
*City Logo/ID to be determined

Millyard District
Auto-Directional Sign*
*Incorporates Amoskeag Byway Logo

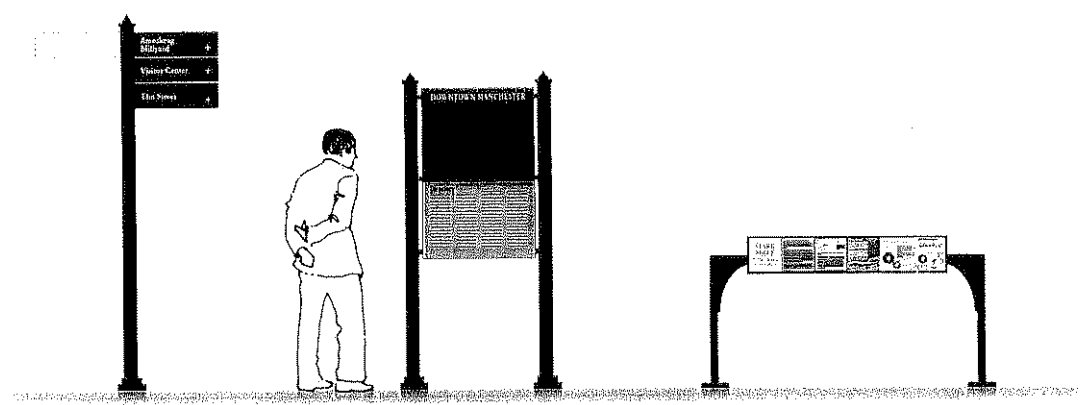
Flag Mounted Street
Auto-Directional Sign*
*Incorporates Amoskeag Byway Logo

Existing Utility Pole
with hand mounting system



Parking Lot Directional Sign

Parking Lot Entry and Information Sign (front & back)



Pedestrian Wayfinding Signs w/Blades

Pedestrian Kiosk (2 Sides)

Interpretive Panel for Amoskeag Byway

Transmittal Letter

To: James Hoben
City of Manchester
480 Hayward Street
Manchester, NH 03103

From: Jason Plourde *JRP*

Subject: Gas Station/Convenience Store-Manchester, NH

Date: May 30, 2006

Project Number: NEX-2005099

We are sending you ☐ Attached ☐ Under Separate Cover ☐ Via FedEx/Priority
the following documents:

☐ Prints ☐ Specifications ☐ Estimates ☐ Shop Drawings ☐ Samples
☐ Other plans & agreement

These items are transmitted as checked below:

☐ For your use ☐ As requested ☐ Returned for Corrections
☐ For review and comment ☐ For approval ☐ For distribution
☐ Other: _____

COMMENTS:

Jim,

Based on our meetings, follow-on discussions, and collaborated efforts, we have prepared the attached Traffic Signal Plans and Agreement for coordination of the South River Road intersections with Second Street/South Main Street and with Colby Court/Bedford Square. Please review and let me know of any questions or modifications. We are trying to have the Agreement established prior to our next Manchester Committee on Public Safety and Traffic meeting that is scheduled meeting for June 20. As such, we will need to have the Agreement finalized by June 6. With the continued efforts between the groups (proponent, City of Manchester, and Town of Bedford), this deadline seems reachable. If you have any questions, please do not hesitate to call.

Jason

GPI Greenman – Pedersen, Inc.

61 Spit Brook Road, Suite 110, Nashua, NH 03060-5614 Tel: (603) 891-2213 Fax: (603) 891-6449

www.gpinet.com

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AGREEMENT

REGARDING IMPROVEMENT, TIMING, AND MAINTENANCE OF
SOUTH RIVER ROAD TRAFFIC SIGNALS AT SECOND STREET AND
SOUTH MAIN STREET IN MANCHESTER, NEW HAMPSHIRE AND AT
COLBY COURT AND BEDFORD SQUARE IN BEDFORD, NEW HAMPSHIRE

AGREEMENT made as of May ___, 2006, by and between the CITY OF
MANCHESTER, a New Hampshire municipal corporation with a principal place of business at
One City Hall Plaza, Manchester, New Hampshire 03101, acting through its Highway
Department ("Manchester"); the TOWN OF BEDFORD, a New Hampshire municipal
corporation with a principal place of business at 24 N. Amherst Road, Bedford, New Hampshire
03110, acting through its Public Works Department ("Bedford"); and EXXONMOBIL OIL
CORPORATION, a New York corporation with a principal place of business at 3225 Gallows
Road, Fairfax, Virginia, 22037 ("ExxonMobil").

WITNESSETH

Whereas, ExxonMobil is the owner of certain real property located at the corner of the
South River Road, Second Street, and South Main Street in Manchester, New Hampshire (the
"Premises") for which the City of Manchester Planning Board has granted final site plan
approval. Pursuant to the Site Plan, ExxonMobil may redevelop and operate a certain gasoline
station, together with convenience store and car wash upon the Premises (the "Station"); and

Whereas, as a condition of the Manchester Planning Board's approval of the Site Plan,
ExxonMobil must make certain modifications to the traffic control signal at the intersection of
South River Road, Second Street, and South Main Street in the City of Manchester and install
a traffic control signal system along South River Road at the intersection of Second Street and
South Main Street in the City of Manchester at the intersection of Colby Court and Bedford
Square in the Town of Bedford, as shown on the plan of four (4) sheets prepared by
Greenman-Pedersen, Inc. dated May 26, 2006 entitled "Traffic Signal Plan, Route 3 - Two
Locations."

Said plans being subject to review and approval by the City and Town before installation,
and said plans are made a part hereof; and in accordance with the provisions to perform work on
a City/Town roadway and made a part of this Agreement; and

WHEREAS, the parties hereto have reached an agreement as to the apportionment of the
work, the expense of carrying out said work, and the ownership and future maintenance thereof;

NOW THEREFORE, in consideration thereof, the City of Manchester, the Town of
Bedford, and ExxonMobil hereby agree, each with the other as follows:

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IMPROVEMENT OF TRAFFIC SIGNAL

ExxonMobil shall initially pay for and improve the traffic signal at the South River Road, South Main Street, and Second Street intersection (the "Signal"), with that equipment and transmitting facilities, as more particularly described in the plans and specifications attached hereto as Exhibit A (the "Work"). The Work will be performed in accordance with the Standard Specifications for Highways, as adopted by the City of Manchester and as provided in the "Manual on Uniform Traffic Control Devices", as adopted by Manchester. During ExxonMobil's performance of the Work, Manchester shall make periodic inspections of the Work to ensure compliance with the Department's standards. Upon completion of the Work, Manchester shall provide a final inspection and certification of compliance with the specifications, pursuant to the Department's standards. ExxonMobil shall coordinate such installation with the Manchester Highway Department, so that the Work will occur with minimal disruption to traffic and maximum attention to safety.

ExxonMobil shall maintain public liability insurance and property damage liability insurance, in proper coverage amounts, to cover its actions under this Agreement and shall require similar insurance from any contractor/subcontractors hired to perform the Work, however, ExxonMobil may self insure.

Exxon Mobil shall complete the Work within eighteen (18) months from the date hereof, provided Manchester may grant an extension of time to fully perform the Work, in its sole discretion.

After completion of the Work, Bedford shall monitor the timing of the Signal and shall coordinate such timing with the South River Road, Colby Court, and Bedford Square intersection located in the Town of Bedford.

After completion of the Work, Manchester will continue to own the Signal and shall be responsible for the maintenance and cost of operating the Signal, including, without limitation, the following: (a) controller unit; (b) telephone line and charge; (c) payment for electricity; (d) pavement markings and signage; (e) signal hardware, including signal heads and signal poles; (f) meter pedestal; (g) OPTICOM detectors and beacons and OPTICOM fire pre-emption modules; and (h) emergency response and repair.

This is a New Hampshire contract to be governed by the laws of the State of New Hampshire and to be performed therein. With respect to any matter pertaining to this Agreement, all parties acknowledge that Hillsborough County Superior Court (North District) in Manchester, New Hampshire will be the sole jurisdiction and venue of any legal action. Notwithstanding the foregoing, Manchester and Bedford shall hold one another harmless from any liability claims from third parties, provided neither party will be required to indemnify the other.

This Agreement contains the entire agreement between the parties, all prior discussions, representations and writings being merged herein. This Agreement may only be changed by a written document executed by all parties.

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Manchester and Bedford acknowledge that proper operation of the Signal will require a joint, coordinated effort on their parts.

DIVISION OF WORK

ExxonMobil will prepare through its own Engineer, all necessary plans, permits, and bidding documents required for the installation of a new traffic control signals, coordination, and roadway improvements as indicated above and as shown on the attached plans.

ExxonMobil will furnish through its own contractor, all necessary labor, materials, equipment and other services necessary for the installation of the traffic control signals, coordination, and roadway improvements as indicated above and as shown on the attached plans.

ExxonMobil agrees to require its Contractor to provide and cause to be maintained Public Liability Insurance and Property Damage Insurance, and also Contractor's Protective Public Liability and Property Damage Liability Insurance on behalf of the Town and the City, and to furnish evidence of such insurance to the Town and the City.

ExxonMobil, through either itself or its Contractor, agrees to provide a License and Permit Bond on behalf of the City of Manchester and the City of Bedford. The License and Permit Bond shall be in the amount of \$100,000.

ExxonMobil agrees not to advertise for construction nor award a contract for any work covered by this Agreement without prior approval by the City and Town of the final plans and specifications.

ExxonMobil agrees that work will not commence without written permission from the City of Manchester and the Town of Bedford. Prior to the commencement of any work, a preconstruction conference may be required by the City and/or Town.

The City and/or Town must approve all contractors, materials and equipment used in this installation. Contractors and subcontractors must be pre-qualified by the New Hampshire Department of Transportation for the type of work they are conducting.

ExxonMobil will furnish at its sole cost and expense, an engineer for proper inspection services necessary during the prosecution of work, and in turn, the City and/or Town will make periodic inspection for compliance with City and/or Town standards.

Upon completion of the work, ExxonMobil, through its Engineer, will be responsible for the final inspection and certification of compliance with specifications. All specifications must meet the Department's standards. Upon completion of the work, ExxonMobil shall submit an as-built drawing for inclusion in the traffic signal layout.

The City of Manchester and the City of Bedford will have reasonable rights of inspection and review of the work and its acceptance.

4

DIVISION OF EXPENSE

The entire cost of the modifications to the existing traffic control signal and the installation of the traffic control signal system as hereinbefore stated and as shown on said plans will be borne by ExxonMobil.

OWNERSHIP AND FUTURE MAINTENANCE

Upon the completion of the modifications to the existing traffic control signal and installation of traffic control signal system and appurtenances to the satisfaction of the City and/or Town, title to said signals and appurtenances shall vest with the City of Manchester and the Town of Bedford for their respective signals and thereafter maintain said signals and appurtenances as installed.

CLOSED LOOP MONITORING SYSTEM

The traffic control signals on Route 3 (South River Road) as mentioned above shall be incorporated into a closed loop monitoring system owned and maintained by the Town of Bedford.

For the purpose of this Agreement, the closed loop monitoring system shall include, but not necessarily be limited to, the master controller, all cabinets, telephone connections, and terminals for the same.

Upon the incorporation of the existing traffic control signals into the closed loop monitoring system to the satisfaction of the City of Manchester and the Town of Bedford, title to said system shall vest with the Town of Bedford, and the Town of Bedford shall thereafter have the obligation and authority to operate and maintain said system and appurtenances as installed.

Any future modifications to the traffic control signal at the intersection of Route 3 (South River Road) and South Main Street in the City of Manchester including, but not limited to timings and phasing adjustments, shall not be made without prior written authorization from the Town of Bedford.

All work covered by this Agreement must be completed within one year unless an authorized time extension is granted by the Department.

4
Witness our hands as of the date first-above written.

EXXONMOBIL OIL CORPORATION

Witness

By: _____, its duly
authorized _____

TOWN OF BEDFORD

Witness

By: _____
Keith Hickey, its duly authorized
Town Manager

CITY OF MANCHESTER

Witness

By: _____
Frank Guinta, its duly authorized
Mayor

OFFICE BUILDING
DRIVEWAY

MAP 662 LOT 15
N/F JULIETTE NEAULT
1999REV. TRUST
JULIETTE R. NEAULT &
GEORGE OUESON, Trustees
756 SOUTH MAP STREET
MANCHESTER, NH 03105
BOOK 6486 PAGE 327

EXIST. R.O.W.

HALE STREET

PROPOSED WHEELCHAIR RAMP

PROPOSED
WHEELCHAIR
RAMP

MAP 654 LOT 1
N/F BARTMOUTH
DOMONS PROFESSIONAL
OFFICE CONDOMINIUMS

REMOVE EXISTING STRIPING
WITHIN CROSSWALK

**THINKS
MOM'S RIGHT**

EAST. P.O.W.
STREET
(W.)

NOTE: SURVEY PROVIDED BY MHI
DESIGN CONSULTANTS, INC.

SOUTH MAIN STREET
(PUBLIC - 50' WIDE R.O.W.)

PROPOSED CAR
WASH 1.132 S.F.
24'-0" x 48'-0"
(1,152 sq. ft.)

PROPOSED
3,925 SF
MOBILE
"ON-THE-RUN"

PROPOSED CROSSWALK
SOUTH MAIN ST. AT HALE ST.
MANCHESTER, NEW HAMPSHIRE

THOMAS, JOHN COMPANY
BURLINGTON, MASSACHUSETTS

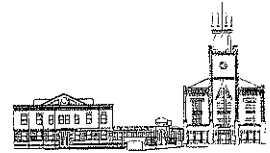
GPI **Greenman-Pedersen, Inc.**
 Construction, Architecture, Planning, Construction Management & Inspection
 301 West Duane Place, Suite 110, Hayward, CA 94504
 Tel: (510) 881-3273 Fax: (510) 881-3444
jpi@greenman-pedersen.com

[illegible]



CITY OF MANCHESTER

Office of the City Clerk



Leo R. Bernier
City Clerk

Carol A. Johnson
Deputy City Clerk

Paula L-Kang
Deputy Clerk
Administrative Services

Matthew Normand
Deputy Clerk
Licensing & Facilities

Patricia Piecuch
Deputy Clerk
Financial Administration

March 9, 2006

Mr. David Preece
Executive Director
Southern NH Planning Commission
438 Dubuque Street
Manchester, NH 03102

Re: Bridge Street Traffic Signalization

Dear Mr. Preece:

Please be advised that in action taken by the Board of Mayor and Aldermen at a meeting held on March 7, 2006, it was voted to accept a report of the Committee on Public Safety and Traffic relative to the above-referenced.

In accepting the report, the Board has requested that Southern NH Planning Commission conduct a study of that area for possible traffic signals.

If you should require any further information, please do not hesitate to contact this office.

Sincerely,

Leo R. Bernier
City Clerk

Enclosure



Southern New Hampshire Planning Commission

438 Dubuque Street, Manchester, NH 03102-3546, Telephone (603) 669-4664 Fax (603) 669-4350
www.snhpc.org

MEMORANDUM

TO: Jim Hoban, City of Manchester Traffic Department

cc: David J. Preece, AICP, SNHPC Executive Director

FROM: Tim White, AICP, SNHPC Senior Transportation Planner *tw*

SUBJECT: Bridge Street Signal Warrant Analyses - Findings

DATE: May 11, 2006

The purpose of this memorandum is to report the findings of the Bridge Street signal warrant analyses. The analyses were conducted in response to a March 9, 2006 request received from the Office of the Manchester City Clerk. The work was coordinated through the Manchester Traffic Department.

Traffic signal warrant analyses were conducted at the Bridge Street/Belmont Street and Bridge Street/Highland Street/Circular Drive intersections. The Bridge Street/Highland Street/Circular Drive intersection is located approximately one-half mile west of I-93 Interchange 9 and the Bridge Street/Belmont Street intersection is located approximately 1,750 feet further west. The signal warrant analyses were conducted after the March 7, 2006 designation of the segment of Bridge Street from Mammoth Road to Hall Street as a school zone by the Board of Mayor and Aldermen. Trinity High School, Central High School, and Hillside Junior High School are all located in this area, and Bridge Street is presently used as a pedestrian route for students traveling to and from these schools.

The signal warrant analyses methodology for the Bridge Street/Belmont Street and Bridge Street/Highland Street/Circular Drive intersections was designed through consultation with the Manchester Traffic Department and through field work completed by the Southern New Hampshire Planning Commission (SNHPC) staff in April 2006. Based on this preliminary work, the following warrants as presented in the Millennium Edition of the "Manual on Uniform Traffic Control Devices" were completed for both intersections:

- Warrant 1 – Eight Hour Vehicular Warrant
- Warrant 2 – Four Hour Vehicular Warrant
- Warrant 3 – Peak Hour
- Warrant 7 – Crash Experience

In order to complete the warrant analyses, manual turning movement counts (TMCs) for the periods 7:00 A.M. to 11:00 A.M. and 2:00 P.M. to 6:00 P.M. were completed at each study area

5

Jim Hoban, City of Manchester Traffic Department
Re: Bridge Street Signal Warrant Analyses – Findings
May 11, 2006

intersection. The results of the TMCs are included in the Appendix which accompanies this memorandum. A.M. and P.M. peak hour intersection capacity analyses were also completed for use in the peak hour signal warrant. The results of the capacity analyses are also included in the Appendix along with intersection field diagrams.

The results of the analyses indicated that traffic conditions at both the Bridge Street/Belmont Street and Bridge Street/Highland Street/Circular Drive intersections did not satisfy the four signal warrants evaluated.

The SNHPC is willing to work with the City in any capacity required to continue to evaluate traffic issues on Bridge Street. Please do not hesitate to call if you have any questions or if you require further information.

APPENDIX

Manchester
 Bridge Street and Belmont Street
 Data Collectors: Pam and Rob
 Weather: Sunny and Warm

File Name : Belmont and Bridge AN
 Site Code : 00000001
 Start Date : 4/11/2006
 Page No : 1

These are comments that appear BEFORE the data.

Groups Printed- Unshifted

End Time	Belmont St From North					Bridge St From East					Belmont St From South					Bridge St From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
07:30	3	5	8	0	16	6	170	4	0	180	3	4	1	2	10	3	150	4	0	157	363
07:45	3	6	17	0	26	14	174	9	4	201	7	3	2	3	15	5	174	1	0	180	422
08:00	0	4	10	0	14	12	195	4	2	213	5	1	1	1	8	1	139	1	0	141	376
Total	6	15	35	0	56	32	539	17	6	594	15	8	4	6	33	9	463	6	0	478	1161
08:15	0	1	9	0	10	15	176	5	12	208	2	1	1	0	4	2	110	0	0	112	334
08:30	1	5	9	0	15	5	218	6	0	229	5	1	1	1	8	2	121	1	0	124	376
08:45	2	0	9	0	11	10	177	6	0	193	2	1	1	0	4	0	116	1	0	117	325
09:00	0	4	9	0	13	6	205	4	0	215	3	2	2	0	7	0	130	1	0	131	366
Total	3	10	36	0	49	36	776	21	12	845	12	5	5	1	23	4	477	3	0	484	1401
09:15	1	2	9	0	12	2	139	3	0	144	5	1	0	1	7	2	102	1	0	105	268
09:30	1	6	5	0	12	11	118	2	0	131	2	2	2	1	7	2	114	0	0	116	266
09:45	1	1	9	0	11	6	96	0	2	104	1	0	0	0	1	4	115	0	0	119	235
10:00	0	6	7	0	13	5	116	4	0	125	4	2	0	0	6	0	106	2	0	108	252
Total	3	15	30	0	48	24	469	9	2	504	12	5	2	2	21	8	437	3	0	448	1021
10:15	1	3	7	0	11	6	94	2	0	102	3	0	0	0	3	1	101	2	0	104	220
10:30	1	0	10	0	11	3	114	1	0	118	0	2	1	0	3	2	108	2	0	112	244
10:45	0	0	5	0	5	5	124	2	0	131	3	0	0	0	3	2	92	0	0	94	233
11:00	2	5	1	0	8	19	95	4	1	119	4	1	1	0	6	2	106	1	0	109	242
Total	4	8	23	0	35	33	427	9	1	470	10	3	2	0	15	7	407	5	0	419	939
Grand Total	16	48	124	0	188	125	2211	56	21	2413	49	21	13	9	92	28	1784	17	0	1829	4522
Apprch %	8.5	25.5	66	0		5.2	91.6	2.3	0.9		53.3	22.8	14.1	9.8		1.5	97.5	0.9	0		
Total %	0.4	1.1	2.7	0	4.2	2.8	48.9	1.2	0.5	53.4	1.1	0.5	0.3	0.2	2	0.6	39.5	0.4	0	40.4	

These are comments that appear AFTER THE TOTALS.

Southern NH Planning Commission

438 DuBuque St.
Manchester, NH 03102
(603) 669-4664

File Name : BRIDGE~1
Site Code : 00000002
Start Date : 4/11/2006
Page No : 1

Manchester
Bridge St and Belmont St
Data Collectors: Pam and Rob
Weather: Warm and Sunny

Groups Printed- Unshifted - Bank 1 - Bank 2

	Belmont St From North						Bridge St From East						Belmont St From South						Bridge St From West							
End Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
14:15	0	4	16	0	20	12	136	5	7	160	3	2	2	0	7	5	149	1	0	155	342					
14:30	3	3	8	0	14	13	154	4	20	191	4	3	3	0	10	7	158	1	0	166	381					
14:45	3	5	6	0	14	25	181	4	3	213	3	4	1	31	39	1	179	0	0	180	446					
15:00	0	5	9	0	14	14	159	4	1	178	2	4	1	7	14	2	168	1	0	171	377					
Total	6	17	39	0	62	64	630	17	31	742	12	13	7	38	70	15	654	3	0	672	1546					
15:15	2	4	11	0	17	15	147	3	4	169	1	2	1	4	8	1	157	3	0	161	355					
15:30	1	7	7	0	15	12	137	3	29	181	2	7	3	1	13	2	143	0	0	145	354					
15:45	2	4	5	0	11	14	147	2	5	168	2	1	0	0	3	0	172	0	0	172	354					
16:00	1	2	3	0	6	10	173	10	1	194	3	1	0	0	4	3	183	1	0	187	391					
Total	6	17	26	0	49	51	604	18	39	712	8	11	4	5	28	6	655	4	0	665	1454					
16:15	4	2	9	0	15	11	152	7	1	171	3	1	4	0	8	4	196	3	0	203	397					
16:30	0	4	8	0	12	13	173	7	10	203	4	3	1	0	8	1	182	2	0	185	408					
16:45	0	8	5	0	13	24	167	3	5	199	3	2	2	0	7	1	199	2	0	202	421					
17:00	2	7	6	0	15	16	188	4	2	210	4	4	2	0	10	2	207	1	0	210	445					
Total	6	21	28	0	55	64	680	21	18	783	14	10	9	0	33	8	784	8	0	800	1671					
17:15	2	3	8	0	13	19	173	2	1	195	5	0	1	0	6	3	222	1	0	226	440					
17:30	2	3	8	0	13	24	193	1	3	221	2	0	2	0	4	2	202	5	0	209	447					
17:45	2	4	3	0	9	19	153	5	1	178	4	3	2	0	9	5	210	1	0	216	412					
18:00	0	6	4	0	10	16	136	4	1	157	6	3	0	0	9	3	155	3	0	161	337					
Total	6	16	23	0	45	78	655	12	6	751	17	6	5	0	28	13	789	10	0	812	1636					
Grand Total	24	71	116	0	211	257	2569	68	94	2988	51	40	25	43	159	42	2882	25	0	2949	6307					
Approach %	11.4	33.6	55	0		8.6	86	2.3	3.1		32.1	25.2	15.7	27		1.4	97.7	0.8	0							
Total %	0.4	1.1	1.8	0	3.3	4.1	40.7	1.1	1.5	47.4	0.8	0.6	0.4	0.7	2.5	0.7	45.7	0.4	0	46.8						
Unshifted	24	71	116	0	211	257	2569	68	94	2988	51	40	25	43	159	42	2882	25	0	2949	6307					
% Unshifted	100	100	100	0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100					
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					

5

File Name : Bridge and Highland AM
 Site Code : 00000003
 Start Date : 4/12/2006
 Page No : 1

Manchester
 Bridge St and Highland St / Circular Dr
 Data Collectors: Pam and Rob
 Weather: Sunny and Warm

These are comments that appear BEFORE the data.

Groups Printed- Unshifted

End Time	Circular Dr From North					Bridge St From East					Highland St From South					Bridge St From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
07:15	5	0	0	0	5	9	160	17	0	186	5	0	1	0	6	2	118	6	0	126	323
07:30	9	3	0	0	12	8	181	17	0	206	19	3	0	0	22	2	121	20	0	143	383
07:45	23	1	2	0	26	13	194	28	0	235	13	4	1	0	18	8	185	16	1	210	489
08:00	9	2	1	0	12	2	198	40	1	241	6	2	3	0	11	13	171	7	0	191	455
Total	46	6	3	0	55	32	733	102	1	868	43	9	5	0	57	25	595	49	1	670	1650
08:15	3	1	0	0	4	1	200	39	0	240	12	2	5	0	19	21	108	1	0	130	393
08:30	3	1	1	0	5	1	215	30	0	246	8	2	9	0	19	9	153	4	0	166	436
08:45	1	0	0	0	1	1	192	14	0	207	7	2	2	1	12	3	124	1	0	128	348
09:00	1	0	2	0	3	3	169	9	0	181	11	0	2	0	13	7	129	5	0	141	338
Total	8	2	3	0	13	6	776	92	0	874	38	6	18	1	63	40	514	11	0	565	1515
09:15	2	0	1	0	3	2	139	7	0	148	5	0	1	0	6	2	111	4	0	117	274
09:30	1	0	0	0	1	5	134	8	0	147	2	0	1	0	3	4	99	3	1	107	258
09:45	1	1	0	0	2	3	139	5	0	147	2	0	4	0	6	5	125	1	1	132	287
10:00	1	2	1	0	4	3	132	6	0	141	6	1	1	0	8	3	97	4	0	104	257
Total	5	3	2	0	10	13	544	26	0	583	15	1	7	0	23	14	432	12	2	460	1076
10:15	1	1	3	0	5	0	111	10	0	121	2	0	2	0	4	3	98	7	0	108	238
10:30	1	1	2	0	4	4	84	6	0	94	9	2	3	0	14	5	123	3	2	133	245
10:45	3	0	4	0	7	5	107	8	0	120	4	0	0	0	4	3	126	5	0	134	265
11:00	2	1	2	0	5	5	109	3	0	117	9	0	2	0	11	6	122	2	0	130	263
Total	7	3	11	0	21	14	411	27	0	452	24	2	7	0	33	17	469	17	2	505	1011
Grand Total	66	14	19	0	99	65	2464	247	1	2777	120	18	37	1	176	96	2010	89	5	2200	5252
Apprch %	66.7	14.1	19.2	0		2.3	88.7	8.9	0		68.2	10.2	21	0.6		4.4	91.4	4	0.2		
Total %	1.3	0.3	0.4	0	1.9	1.2	46.9	4.7	0	52.9	2.3	0.3	0.7	0	3.4	1.8	38.3	1.7	0.1	41.9	

These are comments that appear AFTER THE TOTALS.

File Name : Bridge and Highland
 Site Code : 00000004
 Start Date : 4/12/2006
 Page No : 1

Manchester
 Bridge St and Highland St / Circular Dr
 Data Collectors: Pam and Rob
 Weather: Sunny and Warm

These are comments that appear BEFORE the data.

Groups Printed- Unshifted

End Time	Circular Dr From North					Bridge St From East					Highland St From South					Bridge St From West					
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
14:15	8	0	4	0	12	2	137	25	0	164	8	0	3	0	11	10	151	4	0	165	352
14:30	10	3	3	0	16	5	124	19	0	148	13	3	1	0	17	8	185	10	0	203	384
14:45	23	3	14	1	41	22	159	21	0	202	20	3	6	9	38	6	176	9	0	191	472
15:00	14	1	7	0	22	6	188	19	0	213	18	1	4	0	23	3	184	8	0	195	453
Total	55	7	28	1	91	35	608	84	0	727	59	7	14	9	89	27	696	31	0	754	1661
15:15	2	1	2	0	5	7	151	15	0	173	15	1	10	0	26	6	167	6	0	179	383
15:30	5	1	4	0	10	7	149	19	0	175	19	0	2	0	21	3	163	8	0	174	380
15:45	7	1	5	0	13	6	169	13	0	188	12	1	7	1	21	3	202	7	0	212	434
16:00	6	1	4	1	12	6	162	18	0	186	14	0	4	0	18	5	164	4	0	173	389
Total	20	4	15	1	40	26	631	65	0	722	60	2	23	1	86	17	696	25	0	738	1586
16:15	12	1	2	1	16	5	165	25	0	195	13	4	4	1	22	2	167	7	0	176	409
16:30	9	1	6	0	16	8	167	26	0	201	10	1	3	0	14	0	183	12	0	195	426
16:45	6	1	3	1	11	10	187	19	0	216	14	1	1	2	18	2	216	3	0	221	466
17:00	9	3	5	2	19	6	182	21	0	209	18	4	0	5	27	4	236	3	0	243	498
Total	36	6	16	4	62	29	701	91	0	821	55	10	8	8	81	8	802	25	0	835	1799
17:15	1	2	7	3	13	6	206	18	0	230	22	1	0	3	26	2	234	13	0	249	518
17:30	9	1	6	0	16	8	160	14	0	182	14	0	1	0	15	5	222	11	0	238	451
17:45	9	2	6	0	17	8	218	18	0	244	9	3	2	0	14	2	187	10	0	199	474
18:00	7	4	6	0	17	9	195	26	0	230	6	3	0	1	10	6	162	7	0	175	432
Total	26	9	25	3	63	31	779	76	0	886	51	7	3	4	65	15	805	41	0	861	1875
Grand Total	137	26	84	9	256	121	2719	316	0	3156	225	26	48	22	321	67	2999	122	0	3188	6921
Approch %	53.5	10.2	32.8	3.5		3.8	86.2	10	0		70.1	8.1	15	6.9		2.1	94.1	3.8	0		
Total %	2	0.4	1.2	0.1	3.7	1.7	39.3	4.6	0	45.6	3.3	0.4	0.7	0.3	4.6	1	43.3	1.8	0	46.1	

These are comments that appear AFTER THE TOTALS.

5

TWO-WAY STOP CONTROL SUMMARY

Analyst: THW
 Agency/Co.: SNHPC
 Date Performed: 4/21/2006
 Analysis Time Period: WEEKDAY AM PEAK HOUR
 Intersection: BRIDGE/BELMONT
 Jurisdiction: MANCHESTER
 Units: U. S. Customary
 Analysis Year: 2006 EXISTING
 Project ID: BRIDGE STREET SIGNAL WARRANT STUDY - MANCHESTER
 East/West Street: BRIDGE
 North/South Street: BELMONT
 Intersection Orientation: EW

Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street:	Approach Movement	Eastbound				Westbound		
		1 L	2 T	3 R	4 L	5 T	6 R	
Volume		3	544	10	24	763	46	
Peak-Hour Factor, PHF		0.77	0.77	0.77	0.91	0.91	0.91	
Hourly Flow Rate, HFR		3	706	12	26	838	50	
Percent Heavy Vehicles		1	--	--	1	--	--	
Median Type/Storage		Undivided				/		
RT Channelized?								
Lanes		0	1	0		0	1	0
Configuration		LTR				LTR		
Upstream Signal?		No				No		

Minor Street:	Approach Movement	Northbound				Southbound		
		7 L	8 T	9 R	10 L	11 T	12 R	
Volume		5	6	19	45	16	4	
Peak Hour Factor, PHF		0.63	0.63	0.63	0.63	0.63	0.63	
Hourly Flow Rate, HFR		7	9	30	71	25	6	
Percent Heavy Vehicles		0	0	0	0	0	0	
Percent Grade (%)			3			-5		
Flared Approach: Exists?/Storage				No	/		No	/
Lanes		0	1	0		0	1	0
Configuration		LTR				LTR		

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound				Southbound		
Movement	1	4	7	8	9	10	11	12	
Lane Config	LTR	LTR		LTR			LTR		
v (vph)	3	26		46			102		
C(m) (vph)	767	888		162			74		
v/c	0.00	0.03		0.28			1.38		
95% queue length	0.01	0.09		1.11			8.18		
Control Delay	9.7	9.2		35.8			332.2		
LOS	A	A		E			F		
Approach Delay				35.8			332.2		
Approach LOS				E			F		

5

TWO-WAY STOP CONTROL SUMMARY

Analyst: THW
 Agency/Co.: SNHPC
 Date Performed: 4/21/2006
 Analysis Time Period: WEEKDAY PM PEAK HOUR
 Intersection: BRIDGE/BELMONT
 Jurisdiction: MANCHESTER
 Units: U. S. Customary
 Analysis Year: 2006 EXISTING
 Project ID: BRIDGE STREET SIGNAL WARRANT STUDY - MANCHESTER
 East/West Street: BRIDGE
 North/South Street: BELMONT
 Intersection Orientation: EW

Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street:	Approach Movement	Eastbound				Westbound		
		1 L	2 T	3 R		4 L	5 T	6 R
Volume		9	830	8		10	721	83
Peak-Hour Factor, PHF		0.94	0.94	0.94		0.93	0.93	0.93
Hourly Flow Rate, HFR		9	882	8		10	775	89
Percent Heavy Vehicles		1	--	--		1	--	--
Median Type/Storage		Undivided				/		
RT Channelized?								
Lanes		0	1	0		0	1	0
Configuration		LTR				LTR		
Upstream Signal?		No				No		

Minor Street:	Approach Movement	Northbound				Southbound		
		7 L	8 T	9 R		10 L	11 T	12 R
Volume		7	6	14		27	21	6
Peak Hour Factor, PHF		0.68	0.68	0.68		0.90	0.90	0.90
Hourly Flow Rate, HFR		10	8	20		30	23	6
Percent Heavy Vehicles		0	0	0		0	0	0
Percent Grade (%)			3				-5	
Flared Approach: Exists?/Storage				No	/			No /
Lanes		0	1	0		0	1	0
Configuration		LTR				LTR		

Delay, Queue Length, and Level of Service

Approach Movement	EB		WB		Northbound			Southbound		
	1	4	1	7	8	9	10	11	12	
Lane Config	LTR	LTR	LTR	LTR	LTR	LTR	LTR	LTR	LTR	LTR
v (vph)	9	10			38			59		
C(m) (vph)	783	766			105			71		
v/c	0.01	0.01			0.36			0.83		
95% queue length	0.03	0.04			1.45			4.01		
Control Delay	9.7	9.8			57.6			160.5		
LOS	A	A			F			F		
Approach Delay					57.6			160.5		
Approach LOS					F			F		

TWO-WAY STOP CONTROL SUMMARY

Analyst: THW
 Agency/Co.: SNHPC
 Date Performed: 4/21/2006
 Analysis Time Period: WEEKDAY AM PEAK HOUR
 Intersection: BRIDGE/HIGHLAND/CIR
 Jurisdiction: MANCHESTER
 Units: U. S. Customary
 Analysis Year: 2006 EXISTING
 Project ID: BRIDGE STREET SIGNAL WARRANT - MANCHESTER
 East/West Street: BRIDGE
 North/South Street: HIGHLAND/CIRCULAR
 Intersection Orientation: EW Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street:	Approach Movement	Eastbound				Westbound		
		1	2	3	4	5	6	
		L	T	R	L	T	R	
Volume		28	617	51	137	807	17	
Peak-Hour Factor, PHF		0.83	0.83	0.83	0.98	0.98	0.98	
Hourly Flow Rate, HFR		33	743	61	139	823	17	
Percent Heavy Vehicles		1	--	--	1	--	--	
Median Type/Storage		Undivided				/		
RT Channelized?								
Lanes		0	1	0		1	1	0
Configuration		LTR				L	TR	
Upstream Signal?		No				No		

Minor Street:	Approach Movement	Northbound				Southbound		
		7	8	9	10	11	12	
		L	T	R	L	T	R	
Volume		18	10	39	4	5	38	
Peak Hour Factor, PHF		0.88	0.88	0.88	0.45	0.45	0.45	
Hourly Flow Rate, HFR		20	11	44	8	11	84	
Percent Heavy Vehicles		0	0	0	0	0	0	
Percent Grade (%)			-2			0		
Flared Approach: Exists?/Storage				No	/		No	/
Lanes		0	1	0		0	1	0
Configuration		LTR				LTR		

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Config	LTR	L		LTR			LTR	
v (vph)	33	139		75			103	
C(m) (vph)	799	825		65			141	
v/c	0.04	0.17		1.15			0.73	
95% queue length	0.13	0.60		5.97			4.28	
Control Delay	9.7	10.2		268.1			79.8	
LOS	A	B		F			F	
Approach Delay				268.1			79.8	
Approach LOS				F			F	

TWO-WAY STOP CONTROL SUMMARY

Analyst: THW
 Agency/Co.: SNHPC
 Date Performed: 4/21/2006
 Analysis Time Period: WEEKDAY PM PEAK HOUR
 Intersection: BRIDGE/HIGHLAND/CIR
 Jurisdiction: MANCHESTER
 Units: U. S. Customary
 Analysis Year: 2006 EXISTING
 Project ID: BRIDGE STREET SIGNAL WARRANT - MANCHESTER
 East/West Street: BRIDGE
 North/South Street: HIGHLAND/CIRCULAR
 Intersection Orientation: EW Study period (hrs): 0.25

Vehicle Volumes and Adjustments

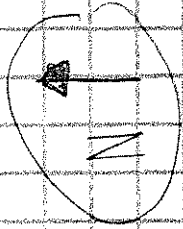
Major Street:	Approach Movement	Eastbound				Westbound		
		1 L	2 T	3 R	4 L	5 T	6 R	
Volume		37	879	13	71	766	28	
Peak-Hour Factor, PHF		0.93	0.93	0.93	0.89	0.89	0.89	
Hourly Flow Rate, HFR		39	945	13	79	860	31	
Percent Heavy Vehicles		1	--	--	1	--	--	
Median Type/Storage		Undivided				/		
RT Channelized?								
Lanes		0	1	0		1	1	0
Configuration		LTR				L	TR	
Upstream Signal?		No				No		

Minor Street:	Approach Movement	Northbound				Southbound		
		7 L	8 T	9 R	10 L	11 T	12 R	
Volume		3	8	63	24	8	28	
Peak Hour Factor, PHF		0.80	0.80	0.80	0.88	0.88	0.88	
Hourly Flow Rate, HFR		3	9	78	27	9	31	
Percent Heavy Vehicles		0	0	0	0	0	0	
Percent Grade (%)			-2			0		
Flared Approach: Exists?/Storage				No	/		No	/
Lanes		0	1	0	0	1	0	
Configuration		LTR				LTR		

Delay, Queue Length, and Level of Service

Approach Movement	EB	WB	Northbound				Southbound		
	1	4	7	8	9	10	11	12	
Lane Config	LTR	L		LTR			LTR		
v (vph)	39	79		90			67		
C(m) (vph)	765	722		155			41		
v/c	0.05	0.11		0.58			1.63		
95% queue length	0.16	0.37		3.03			6.89		
Control Delay	10.0-	10.6		56.2			526.9		
LOS	A	B		F			F		
Approach Delay				56.2			526.9		
Approach LOS				F			F		

3/1/06



Granite curb & sidewalk

BRIDGE ST

Granite curb & sidewalk

BEAUMONT ST
(NO SIDEWALK)

-5%

12
TYP

12
TYP

8

DELI

NOSE IN
PARKING

+6%

-1%

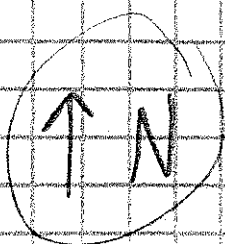
+3%

MTA BUS

Bridge

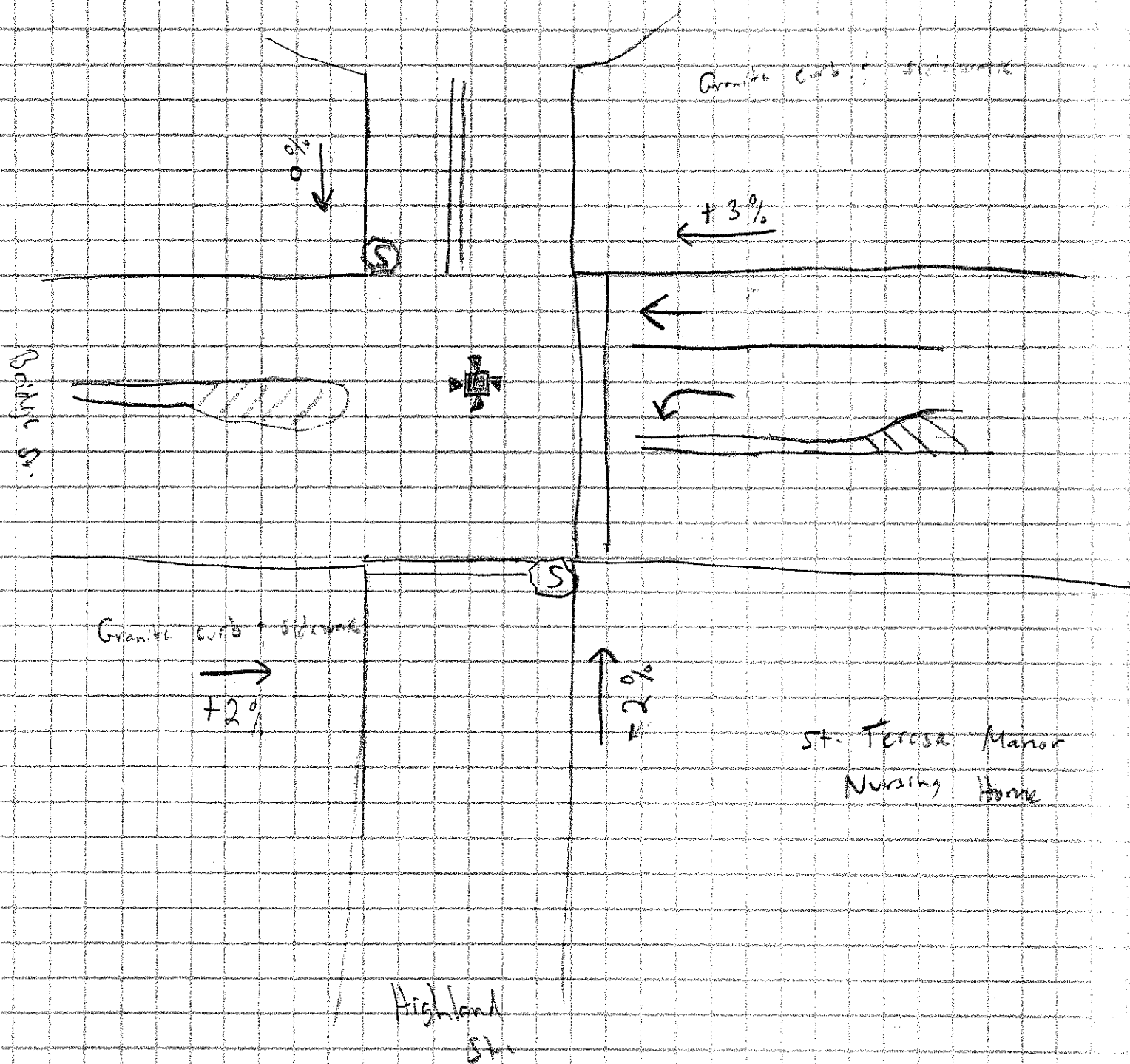
ST

3/1/06



DERRYFEELD PARK

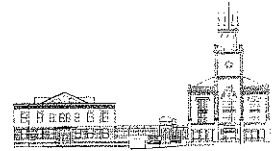
Circular Dr.





CITY OF MANCHESTER

Office of the City Clerk



Leo R. Bernier
City Clerk

Carol A. Johnson
Deputy City Clerk

Paula L-Kang
Deputy Clerk
Administrative Services

Matthew Normand
Deputy Clerk
Licensing & Facilities

Patricia Piecuch
Deputy Clerk
Financial Administration

Memo To: Frank Thomas, Public Works Director
Robert MacKenzie, Planning Director
Paul Borek, Economic Development Director

From: C. Johnson
Deputy City Clerk

Date: May 16, 2006

Re: Traffic Committee Request

The Committee on Traffic has requested that you review the Middle and Market Street area and submit a potential parking plan, with estimated costs, for increasing parking spaces on these streets in a manner similar to that which was formerly presented to the Board for the Mechanic Street area.

The Committee has received numerous requests for permit parking in the Middle Street Lot and is looking to expand the number of spaces in the area. Your prompt response to the Committee in care of the City Clerk's office would be appreciated.



**City of Manchester
Department of Highways**

227 Maple Street *
Manchester, New Hampshire 03103-5596
(603) 624-6444 Fax # (603) 624-6487

Commission

Edward J. Beleski
- Chairman
Joan Flurey
William F. Houghton Jr.
Robert R. Rivard
William A. Varkas

Frank C. Thomas, P.E.
Public Works Director

Kevin A. Sheppard, P.E.
Deputy Public Works Director

June 12, 2006

Traffic Committee of the
Honorable Board of Mayor and Aldermen
C/O Mr. Leo Bernier
CITY CLERKS OFFICE
One City Hall Plaza
Manchester, New Hampshire 03103

Re: Response to Traffic Committee Request
Middle Street and Market Street Parking Plan

Gentlemen:

I have reviewed your request for a parking plan for Middle Street and Market Street that would provide an increase in parking similar to the plan provided for Mechanic Street in the recent Downtown Parking Study.

In the course of my preliminary work, I have found that changing the parking layout on these two streets is not feasible. A reasonable lane width between angled parking on one side of the street and parallel parking on the opposite side might be 15' (although the Fire Department would prefer a 22' lane width).

Market Street:

With 45° angled parking on Market Street you could gain up to 16 parking spaces (if you did not install curbed bump-outs), but the lane width would only be about 9'. With 25° angled parking on Market Street you could gain only one space, but the lane width would only be about 12.5'.

Middle Street:

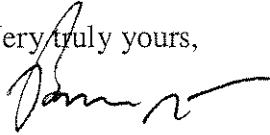
With 45° angled parking on Middle Street you could gain up to 14 parking spaces (if you did not install curbed bump-outs), but the lane width would only be about 13'. With 25° angled parking on Market Street you could gain only one space, but the lane width would be about 18.5'.

6

Because both streets have existing brick sidewalks and lighting in relatively good condition, to bring them to the level described for Mechanic Street (as part of the Downtown Parking Study), only curbed bump-outs and a new drainage systems would have to be installed. The cost for each street would be approximately \$200,000. The gain in parking spaces would be about 4 spaces less than noted above if curbed bump-outs were installed.

Due to the narrow travel lanes that would result, we do not recommend angled parking on either Market Street and Middle Street. If you have any questions or comments or if I can be of further assistance, please do not hesitate to call.

Very truly yours,



Bruce A. Thomas
Engineering Manager

c/Frank C. Thomas, P.E.
Kevin A. Sheppard, P.E.

Market Street Sidewalk

B.A.T. June 13, 2006

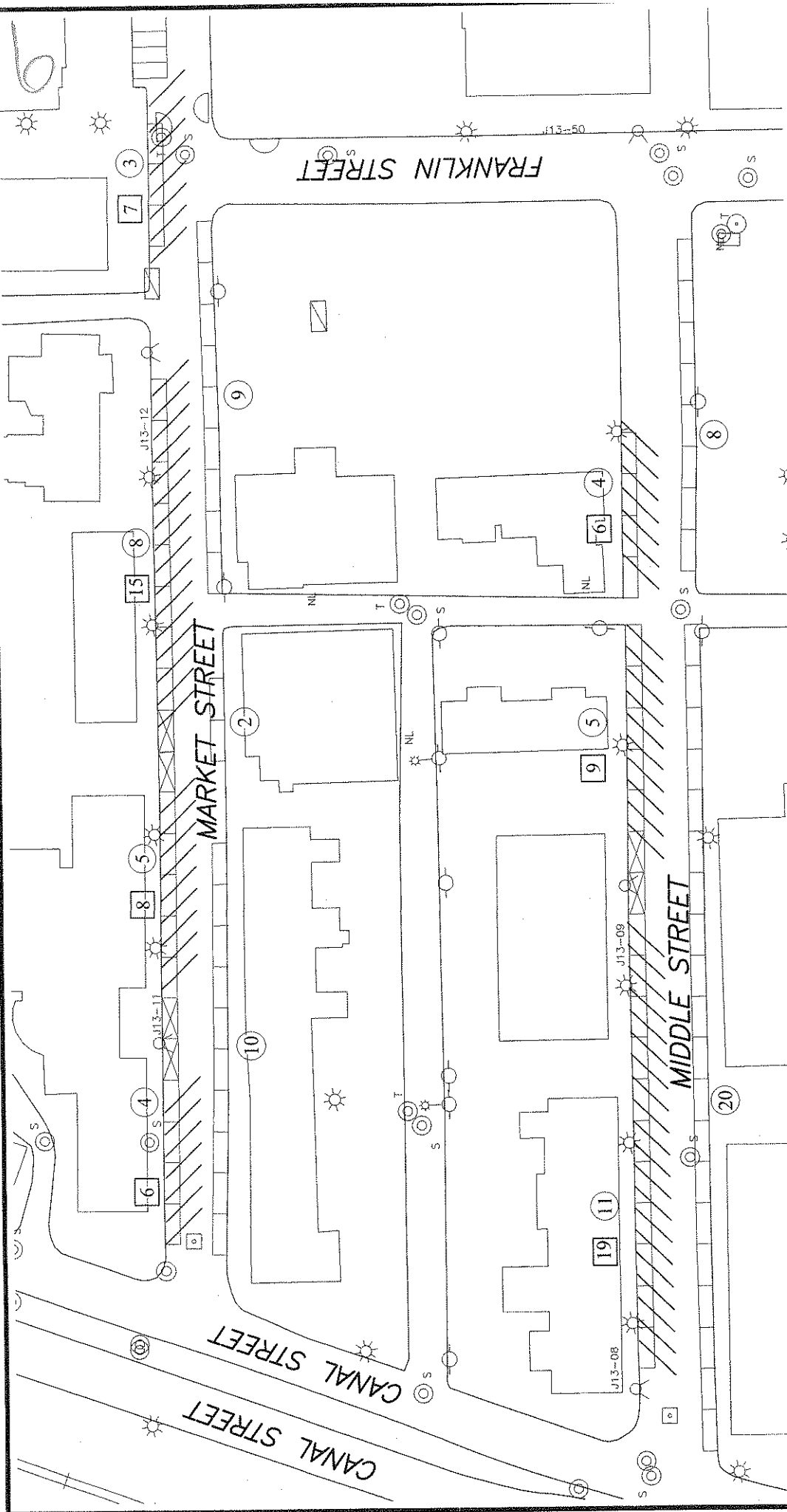
Project Description: Install brick bumpouts and new drain lines.

ITEM NO.	DESCRIPTION	UNITS	QUANTITY	PRICE	AMOUNT
304.2	Gravel (for Trench Repair)	CY	156	\$40	\$6,243
304.3	Crushed Gravel (for Trench Repair)	CY	117	\$40	\$4,682
403.12	Hot Bit. Pavement Hand Method	TON	80	\$100	\$8,007
#N/A	15" HDPE	LF	60	\$55	\$3,300
#N/A	18" HDPE	LF	400	\$65	\$26,000
#N/A	Catch Basins, 4' Dia, Type B	VF	24	\$350	\$8,400
#N/A	Drain Manhole, 4' Diameter	VF	12	\$350	\$4,200
#N/A	Drain Manhole Cover and Frame	EA	2	\$350	\$700
#N/A	Grate and Frames, Type B	EA	4	\$350	\$1,400
608.34	Brick Paver Sidewalk	SY	155	\$250	\$38,750
609.5	New Granite Curb	LF	200	\$25	\$5,000
609.5	Reset Granite Curb	LF	267	\$15	\$4,005
614.511	Concrete Pull Box	EA	0	\$300	\$0
614.7318	3" PVC Conduit, Schedule 80 (Including Specified Excavation)	LF	0	\$14	\$0
618.109	Uniformed Officers and Flagmen	ALL	1	\$5,000	\$5,000
619.2	Const. Signs and Warning Devices	LS	1	\$500	\$500
625.91	Light Pole Bases	EA	0	\$600	\$0
625.92	Amoskeag Light Poles	EA	0	\$7,000	\$0
625.93	Lighting Energization	LS	1	\$10,000	\$10,000
628.2	Saved Bit. Concrete Pavement	LF	267	\$5	\$1,335
629	Testing of Materials	ALL	1	\$500	\$500
692	Mobilization	LS	1	\$25,000	\$25,000
990.1	Tactile Warning Surface	EA	4	\$1,000	\$4,000
1001.1	Remove and Salvage Parking Meters	LS	1	\$3,000	\$3,000
1002.1	Installation of Parking Meter Posts	EA	22	\$30	\$660

6

5000	Trees	LS	6	\$500	\$3,000
	Subtotal:				\$163,682
	15% Contingency:				\$24,552
	Total:				\$188,234
	USE:				\$200,000

Market Street, Middle Street and Mechanic Street Angled Parking B.A.T. June 13, 2006						
Market Street	Street Width of Angled Parking	Street Width of Parallel Parking	Total Street Width Available	Final Lane Width	Gain in Parking Spaces	
45 Degree Parking	19.1	8	36	8.9	16	
25 Degree Parking	15.5	8	36	12.5	1	
Middle Street	Street Width of Angled Parking	Street Width of Parallel Parking	Total Street Width Available	Final Lane Width		
45 Degree Parking	19.1	8	40.2	13.1	14	
25 Degree Parking	15.5	8	40.2	16.7	1	
Mechanic Street	Street Width of Angled Parking	Street Width of Parallel Parking	Total Street Width Available	Final Lane Width		
45 Degree Parking	19.1	8	42	14.9	22	
25 Degree Parking	15.5	8	42	18.5	n/a	



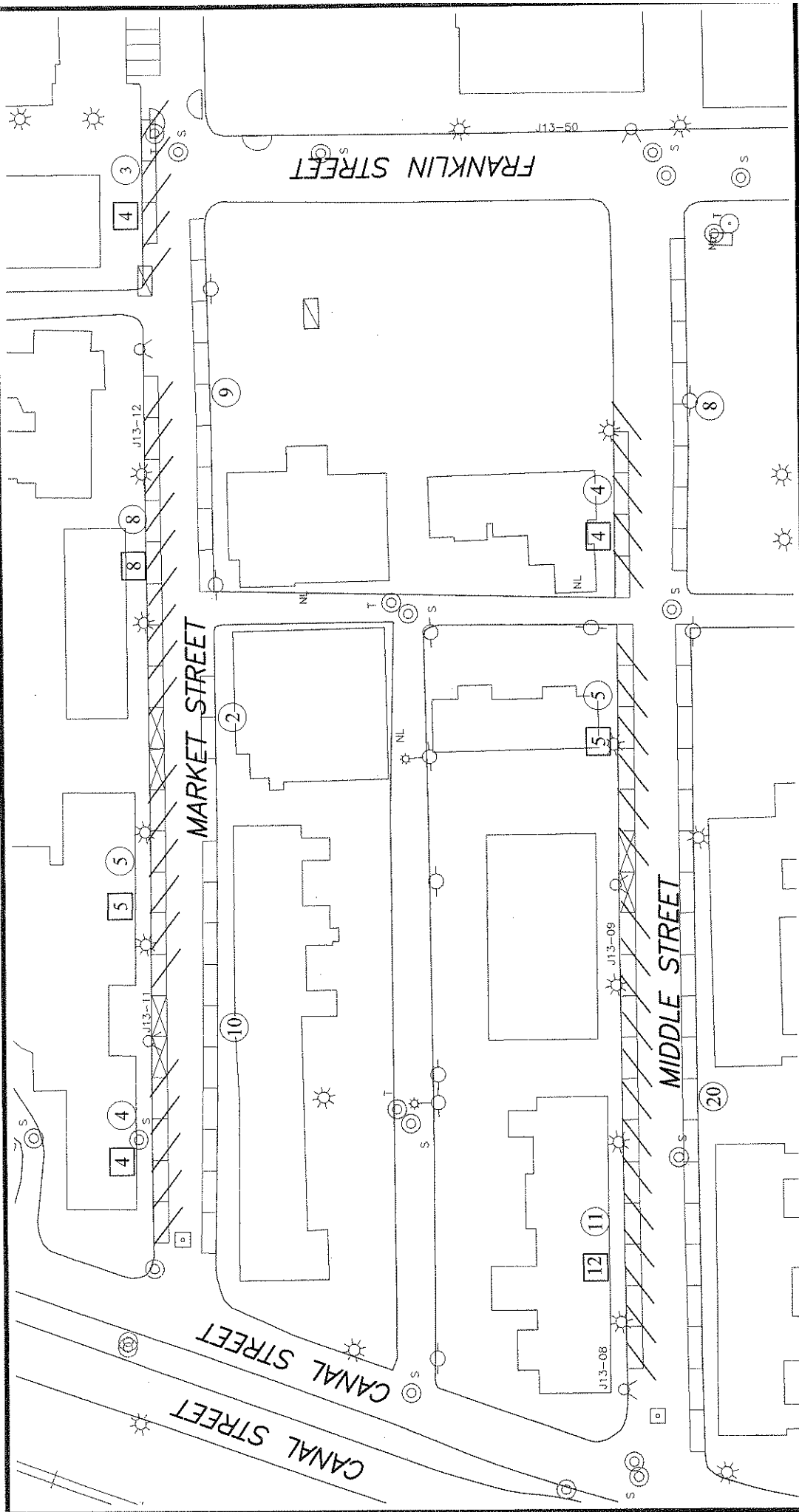
45° ANGLED PARKING
 MARKET STREET AND MIDDLE STREET
 MANCHESTER, NEW HAMPSHIRE
 JUNE, 2006



NORTH

SCALE:
 1" = 50'

- # Number of Existing Spaces
- # Number of Proposed Spaces



25° ANGLED PARKING
 MARKET STREET AND MIDDLE STREET
 MANCHESTER, NEW HAMPSHIRE
 JUNE, 2006

← NORTH

SCALE:
 1" = 50'

1

City of Manchester New Hampshire

In the year Two Thousand and six

AN ORDINANCE

"Amending Section 70.55 Residential Permit Parking, of the Code of Ordinances of the City of Manchester by adding a Residential Parking Permit Zone #7."

BE IT ORDAINED, By the Board of Mayor and Aldermen of the City of Manchester,
as follows:

- I. Amending Section 70.55, Residential Permit Parking of the Code of Ordinances by adding a Section 70.55 (D)(7) as bolded (**bold**). Portions of the section in regular type remain unchanged:

(D) Residential Parking Permit Zones. The following areas are hereby designated as the Residential Parking Permit Zones:

(7) **Residential Parking Permit Zone #7. Area described as follows:**
Both sides of Joliette Street from the north side of Kelley Street to the south side of Bremer Street, only.

- II. This Ordinance shall take effect upon its passage.

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PO Box 6073
Manchester, New Hampshire 03108

Wednesday, June 7, 2006

City of Manchester Public Safety/Traffic Committee
Aldermen Osborne, O'Neil, Shea, Roy, Long
One City Hall Plaza
Manchester, New Hampshire 03101

RE: Safety of Belmont St. & Spruce St. intersection

Dear Safety Committee:

As you are probably aware, accidents at the intersection of Belmont and Spruce are very common. In fact, there have been at least three in the past week. It seems to me, that one of the contributing factors to accidents at the intersection, is the short one way section of Belmont. Possibly, the signage is not appropriate for drivers on Massabesic Street alerting them to the one way section of road. This is not to say that all the accidents are related to the one way section of roadway. It is merely a matter of time before one of these accidents ends in a fatality. There are often children out playing and the general "hustle and bustle" of the neighborhood puts pedestrians in danger here.

I have lived at this address (58 Massabesic) for 4 years and cannot recount the number of accidents I've seen here. I have addressed this issue and speeding with the prior administration. Mayor Baines had additional speed caution signs erected.

I would appreciate your consideration in this matter and look forward to your response.

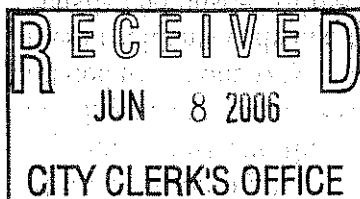
Thank you,

James Osborne

James Osborne

540-8895

jimo5@comcast.net



9
June 7, 2006

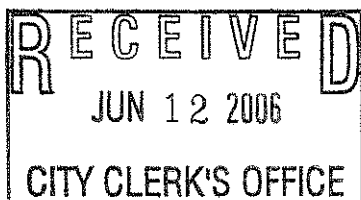
City of Manchester
Department of Public Safety and Traffic Committee
Attn: City Clerk
900 Elm Street
Manchester, N.H.

To whom it may concern,

As residents of Karatzas Avenue, it has been brought to our attention that the removal of the posted 'No Parking' ordinance on Karatzas Avenue in Manchester, N.H. is under question and review to remove the current 'No Parking on this Side of the Street' signs. These signs were previously installed and approved by appropriate Manchester City Boards based on the requests of the residents and the condition of the road.

To reiterate our concerns:

- Karatzas Avenue does not accommodate any two way traffic with on street parking. This is based on the width of the road.
- The current infrastructure and condition of the road does not allow for two way traffic and the access of any emergency vehicles. This situation would create a hazard and access issues if any parking was allowed.
- The condition of Karatzas Avenue with the current deteriorating road surface will not sustain any traffic increase and the weight of parked vehicles.
- Currently there are no sidewalks on either side of Karatzas Avenue and therefore would create a hazard to pedestrians walking on the road.
- Based on Karatzas Avenue being a 'dead end' street, any influx in traffic patterns or parking on the street, would not accommodate 'u-turns' or vehicle direction changes without accessing private properties. There is only one inlet and outlet for this location and changes in traffic patterns will become an issue.

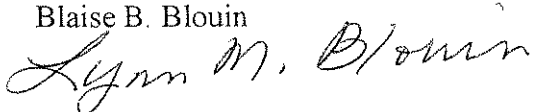


This is very serious matter and any unforeseen changes or condition changes as detailed in the notations above for this area would highly impact safety and increase liabilities for residence and the City of Manchester.

Respectfully Submitted,



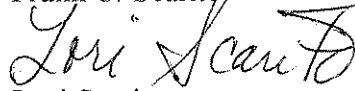
Blaise B. Blouin



Lynn M. Blouin



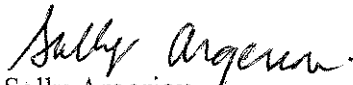
Frank C. Scarito



Lori Scarito



Milton Argeriou



Sally Argeriou

3/21/06 - Tabled -
Fire to report
back at future

Alderman O'Neil asked are any of these time sensitive that if we don't get approved for the budget process we are going to have to wait an entire year. 5/16/06 - Intg. Remained tabled.

Mr. Clougherty answered some of them may be that is why we are here before you tonight asking to try and move it.

Chairman Osborne called for a vote. There being none opposed, the motion carried.

It on
ext
agenda
Alderman O'Neil stated I have two quick things. Under new business at the last full Board meeting I brought up a couple of issues related to the storm and all of this addresses public safety so maybe it could be reported back to us. Was the emergency center opened and if it was what type of services and coordination was it providing and secondly I think there was a significant issue with street closures where the utilities were making decisions without consulting the Police Department and in some cases they let police officers go from the detail and streets remained closed for a significant amount of hours after that. Those are two things related to the storm that I think would be appropriate for this Committee to address. The second thing I brought up...I have a personal concern that the police officers are making a decision do I work a construction detail for four hours with little or no headaches or do I work a bar deal in some of these clubs where we have problems where I am going to be possibly making an arrest. I guess what is happening based on the rate of pay being the same for either detail is the police officers are taking the construction details and we may not be filling all of the club details that we really need to and we may have to come up with a rate for the clubs and nightclubs that is separate from the other detail.

Chairman Osborne asked is that your recommendation.

Alderman O'Neil answered sometime I would like to see us have a discussion about those things. I don't think I need to make a motion. Can we get them on the next agenda?

Deputy Clerk Normand stated I will take care of it.

There being no further business, on motion of Alderman Shea, duly seconded by Alderman O'Neil it was voted to adjourn.

A True Record. Attest.

Clerk of Committee